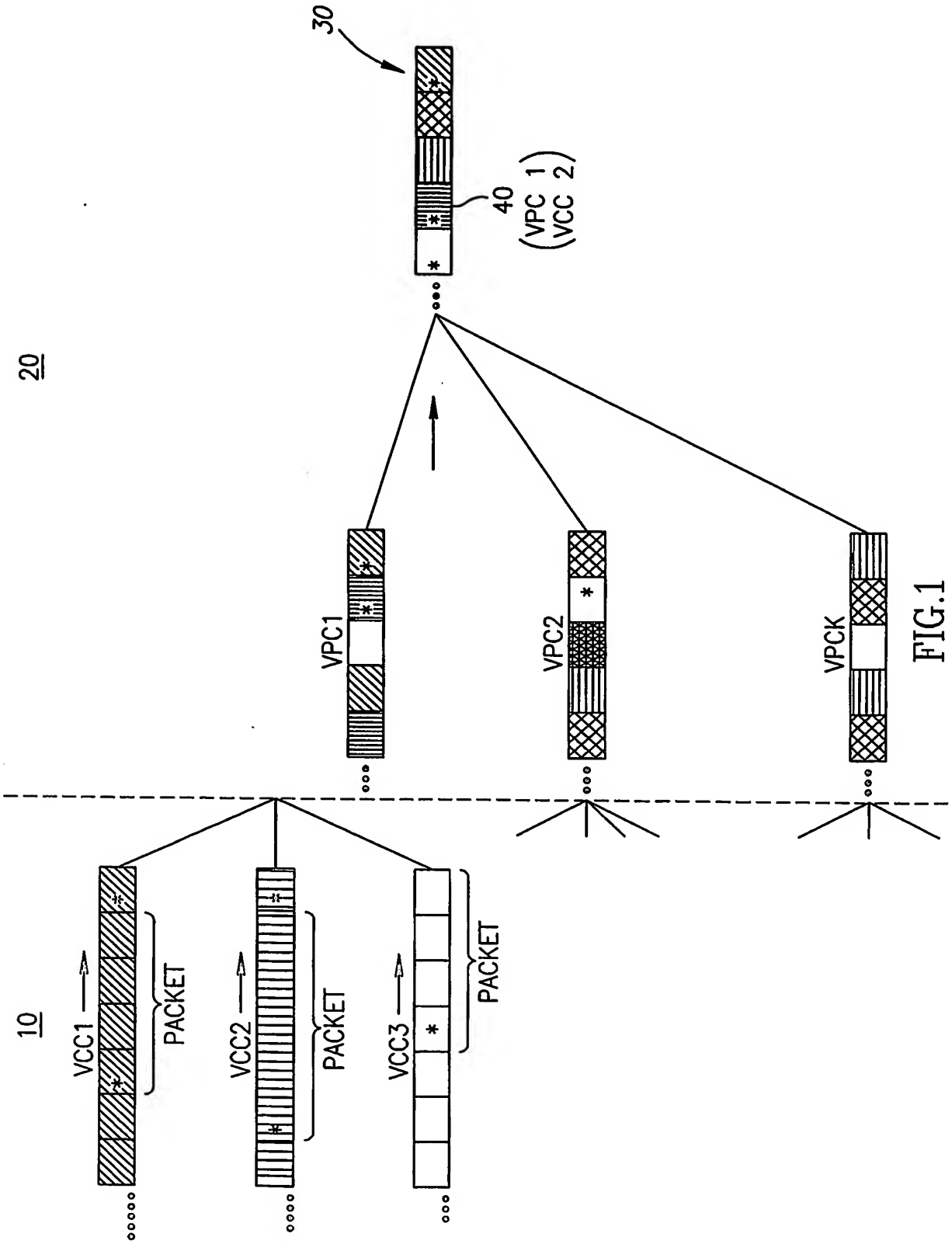

30
40
(VPC 1
VCC 2)
20
VPC1
VPC2
VPCK
10
VCC1
PACKET
VCC2
PACKET
VCC3
PACKET

FIG.1

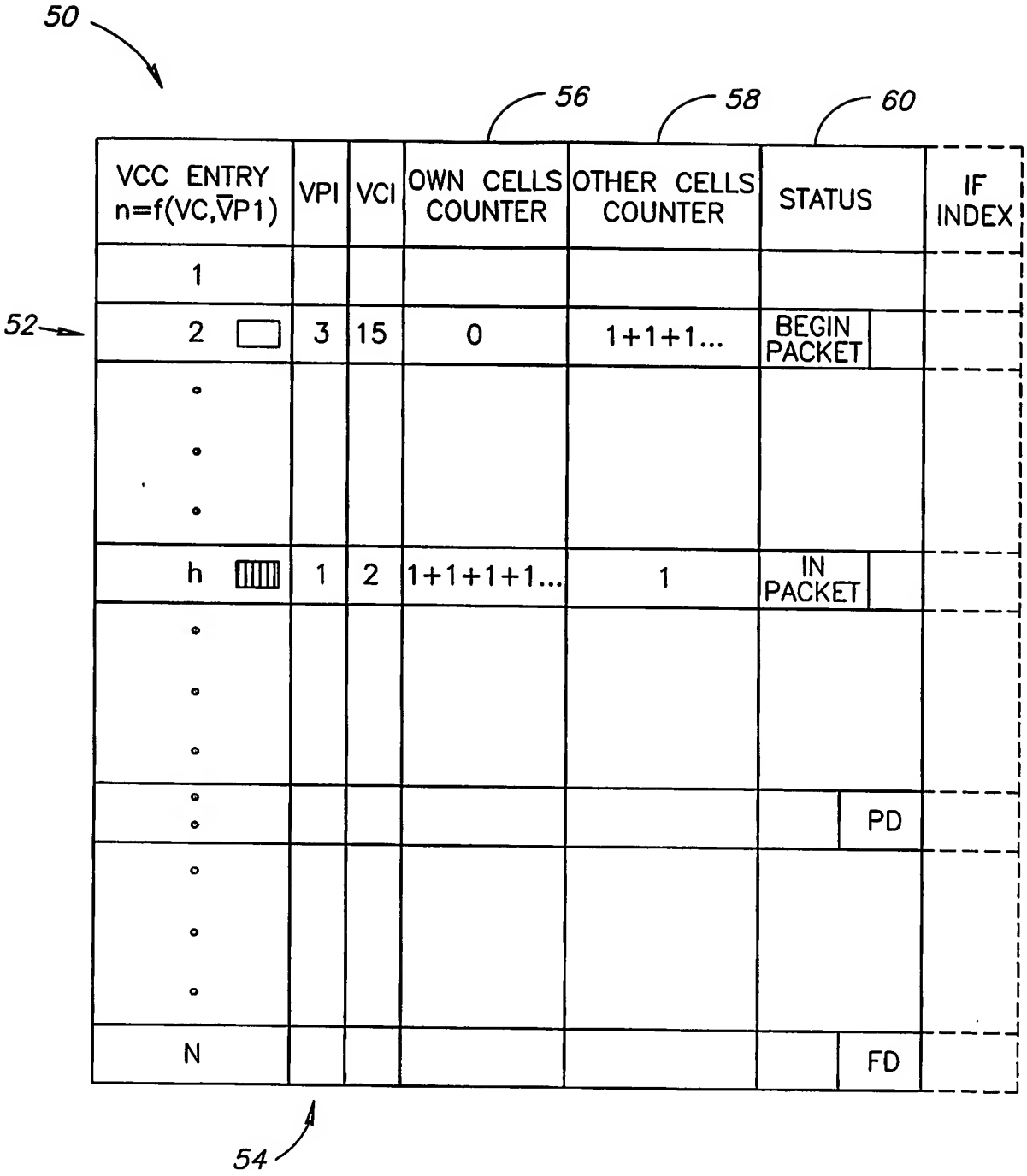

50
56
58
60
VCC ENTRY n=f(VC,VP1)
VPI
VCI
OWN CELLS COUNTER
OTHER CELLS COUNTER
STATUS
IF INDEX
1
52
2
3
15
0
1+1+1...
BEGIN PACKET
h
1
2
1+1+1+1...
1
IN PACKET
PD
N
FD
54

FIG.2

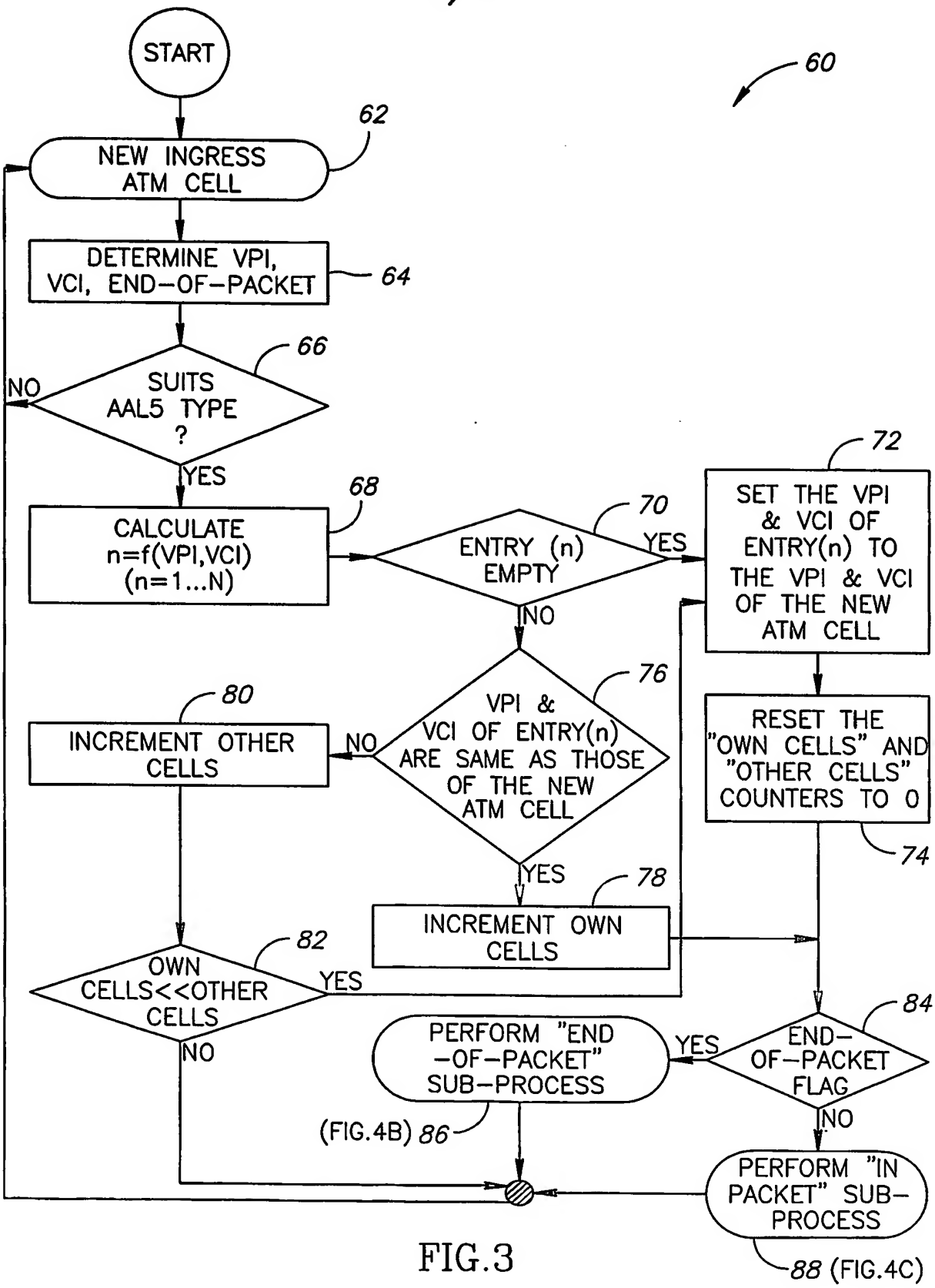
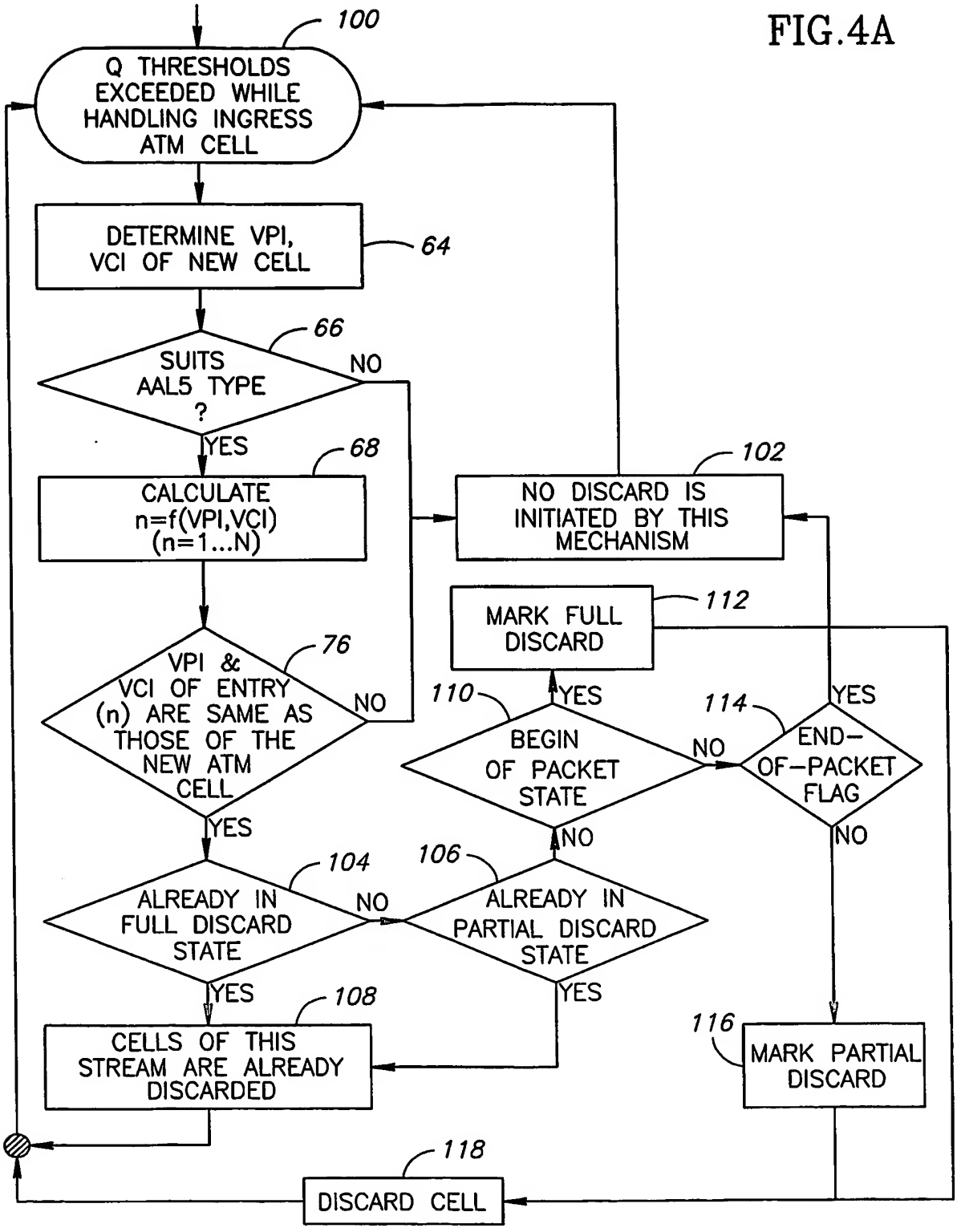

START
60
62
NEW INGRESS ATM CELL
DETERMINE VPI, VCI, END-OF-PACKET
64
66
SUITS AAL5 TYPE ?
NO
YES
68
CALCULATE n=f(VPI,VCI) (n=1...N)
70
ENTRY (n) EMPTY
YES
NO
72
SET THE VPI & VCI OF ENTRY(n) TO THE VPI & VCI OF THE NEW ATM CELL
RESET THE "OWN CELLS" AND "OTHER CELLS" COUNTERS TO 0
74
76
VPI & VCI OF ENTRY(n) ARE SAME AS THOSE OF THE NEW ATM CELL
NO
YES
80
INCREMENT OTHER CELLS
78
INCREMENT OWN CELLS
82
OWN CELLS<<OTHER CELLS
YES
NO
84
END-OF-PACKET FLAG
YES
NO
PERFORM "END-OF-PACKET" SUB-PROCESS
(FIG.4B) 86
PERFORM "IN PACKET" SUB-PROCESS
88 (FIG.4C)

FIG.3

FIG.4A


100
Q THRESHOLDS EXCEEDED WHILE HANDLING INGRESS ATM CELL
DETERMINE VPI, VCI OF NEW CELL
64
66
SUITS AAL5 TYPE ?
NO
YES
68
CALCULATE n=f(VPI,VCI) (n=1...N)
102
NO DISCARD IS INITIATED BY THIS MECHANISM
112
MARK FULL DISCARD
76
VPI & VCI OF ENTRY (n) ARE SAME AS THOSE OF THE NEW ATM CELL
NO
YES
110
BEGIN OF PACKET STATE
YES
NO
114
END-OF-PACKET FLAG
YES
NO
104
ALREADY IN FULL DISCARD STATE
NO
YES
106
ALREADY IN PARTIAL DISCARD STATE
YES
108
CELLS OF THIS STREAM ARE ALREADY DISCARDED
116
MARK PARTIAL DISCARD
118
DISCARD CELL

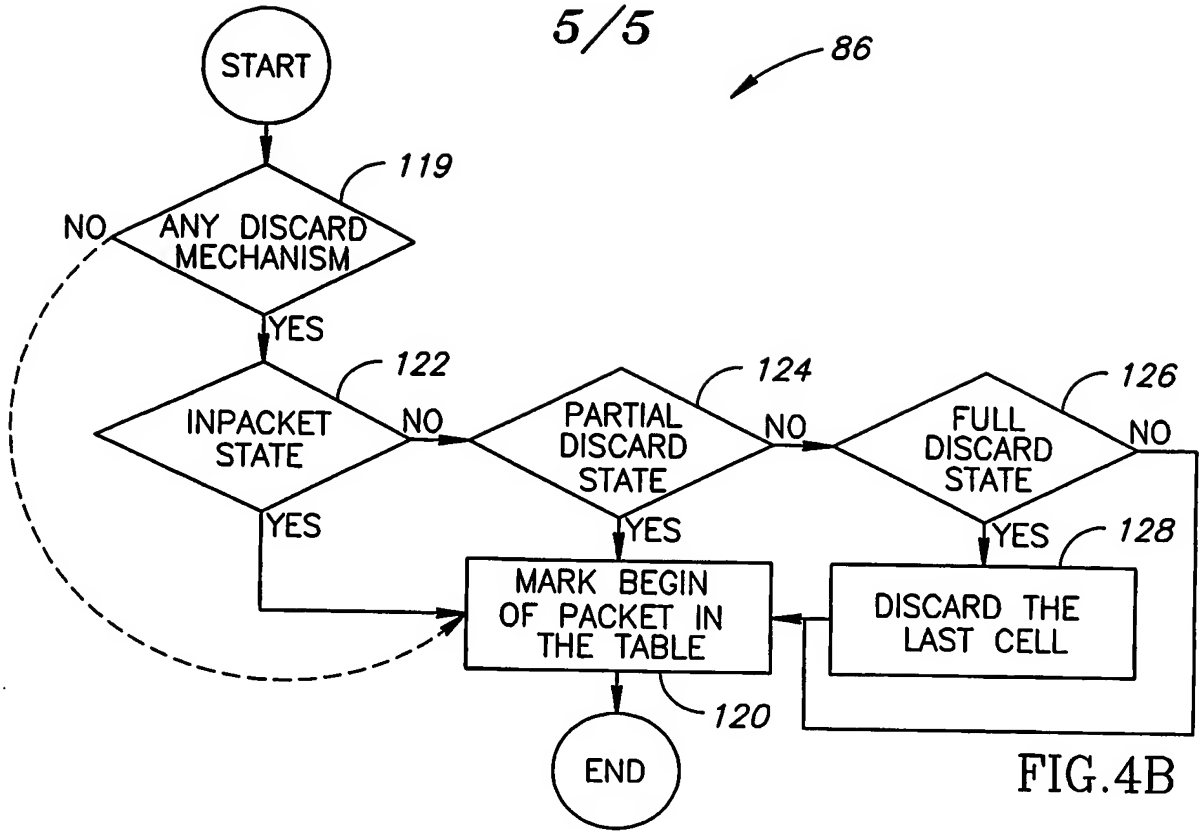

86
START
119
ANY DISCARD MECHANISM
NO
YES
122
INPACKET STATE
NO
YES
124
PARTIAL DISCARD STATE
NO
YES
126
FULL DISCARD STATE
NO
YES
128
MARK BEGIN OF PACKET IN THE TABLE
DISCARD THE LAST CELL
120
END

FIG.4B

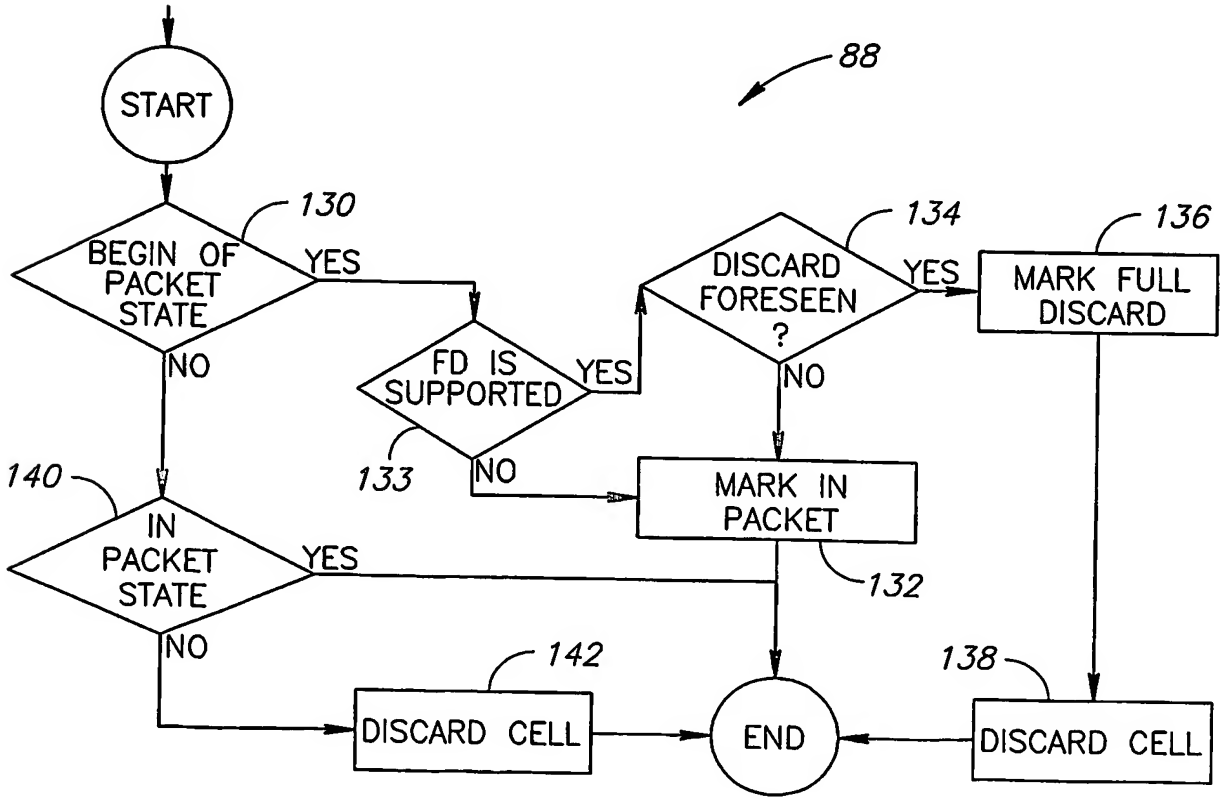

88
START
130
BEGIN OF PACKET STATE
YES
NO
FD IS SUPPORTED
YES
133
NO
134
DISCARD FORESEEN ?
YES
NO
136
MARK FULL DISCARD
MARK IN PACKET
132
140
IN PACKET STATE
YES
NO
142
DISCARD CELL
END
138
DISCARD CELL

FIG.4C